

## **OPERATOR'S MANUAL**

### **PORTABLE MAGNETIC DRILLING MACHINE**

### **MINIBEAST**



UNIT 21 EMPIRE BUSINESS PARK, ENTERPRISE WAY  
BURNLEY, LANCASHIRE, UK, BB12 6LT

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**1. GENERAL INFORMATION**

<b>Model</b>	MINIBEAST
<b>Weight</b>	10kg
<b>Cutter Capacity</b>	35mm Ø x2" depth of cut
<b>Twist Drill Capacity</b>	12mm with twist drill set
<b>Motor</b>	1010 watts
<b>Height Min/Max</b>	Min 307 / Max 377
<b>Length</b>	240mm
<b>Width</b>	166mm
<b>RPM</b>	Single Speed 350 RPM
<b>Magnetic Base Dimensions</b>	80mm x 160mm
<b>Magnet Deadlift</b> <i>(on 25mm plate)</i>	980kg
<b>Noise Level</b>	Does not exceed 95dB
<b>Vibration Level</b>	Does not exceed 2,5m/s <sup>2</sup>
<b>Voltage</b>	110v or 240v

## 2. SAFETY PRECAUTIONS

1. Before starting, read this Operator's Manual and complete proper occupational safety and health training.
2. Machine must be used only in applications specified in Operator's Manual.
3. Machine must be complete and all parts must be genuine and fully operational.
4. Power supply specifications must conform to those specified on rating plate.
5. Power supply socket must be equipped with grounding pin.
6. Never carry machine by cord or yank it to disconnect plug from socket. It may cause power cord to break and result in electric shock.
7. Untrained bystanders must not be present near machine.
8. Before starting, check condition of machine and electrical installation, including power cord, plug, control panel components, and milling tools.
9. Keep machine dry. Exposing it to rain, snow, or frost is prohibited.
10. Keep work area well lit, clean, and free of obstacles.
11. Never use machine near flammable fluids or gases, nor in explosive environments.
12. Never use blunt or damaged tools.
13. Use only tools recommended by manufacturer and specified in Operator's Manual.
14. Before every use, inspect machine to ensure it is not damaged. Check whether any part is cracked or improperly fitted. Make sure to maintain proper conditions that may affect machine operation.
15. Always use safety goggles, hearing protection, gloves, and protective clothing during operation. Do not wear loose clothing.
16. Do not touch moving parts or metal chips formed during drilling. Prevent objects from being caught in moving parts.
17. After every use, remove metal chips from machine, particularly from drilling arbor. Never remove metal chips with bare hands.
18. Maintain machine and tools with care. Cover steel parts with thin grease layer to protect them against rust when not in use for a longer period.
19. Perform all maintenance work only with power cord unplugged from power socket.
20. Perform all repairs only in service center appointed by seller.

21. If machine falls on hard surface, from height, is wet, or has other damage that could affect technical state of machine, stop operation and immediately send machine to service center for inspection.



**WARNING! Safety rules must be closely observed.**

**Minibeast** drilling machine must be connected to "protected power source" which is properly grounded. Improperly connecting the grounding wire can result in the risk of electrical shock. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the tool. Never remove the grounding prong from the plug. Do not use tool if the cord or plug is damaged, have it repaired before using. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician. The Minibeast must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. If in doubt of proper grounding, call a qualified electrician.

### 3. STARTUP AND OPERATION



**WARNING! Read safety precautions before starting.**

#### **3.1 Operating instructions (Before you begin)**

Remove all contents from the packaging and inspect to ensure no damage was incurred during shipping. Your Minibeast package should include the following;

Spoke Handles	Qty 3
Safety Chain	Qty 1
4mm Allen Key	Qty 1

#### **3.2 Before you Cut**

Before positioning the machine on work piece always make sure that:

- Work piece is made of steel
- Thickness of steel is at least (10mm)
- Surface of Steel under the Magnet is flat
  
- Wipe, brush or sand down clean surface where you intended do use the drilling machine, so that you remove rust, paint, dirt etc which would reduce adhesive power of the electromagnetic base.
- Install Turbo-cutter in the machine before plugging it into mains, then plug in and position where you wish to use it.
- Place the machine so that the tool is over the centre of the hole you intend to make and turn the Magnetic Base ON.

### **3.3 Ready to Make the Cut**

1. Insert the annular cutter in to the machine arbor, lining up the flats on the cutter shank drive with the set screws on the arbor. Secure the set screws making sure the screws are recessed in Arbor body.  
The surface you are working on should be clean and level, free from rust, scale, dirt and chips.
2. When using the annular cutter arbor fill coolant reservoir with a water-soluble coolant.
3. Position the Minibeast on the work piece.
4. Lower cutter / drill to surface of materiel. When using cutter tool holder, coolant flow starts when pilot pin is depressed. Lifting pilot pin off work surface will stop coolant flow.
5. Place the drilling machine on the work piece, with pilot pin over the centre of the hole to be cut.
6. Move the rocker switch located on the panel to the ON position. The switch will illuminate to indicate DC power is going to the magnet.
7. Depress motor ON switch to start drill.
8. To start a cut, apply pressure until the cutter has established an external groove. Then apply steady pressure through the remainder of the cut (Note: Do not peck

drill when using annular cutters). The tools are designed to evacuate chips when drilling.

### **Correct Cutter Usage**

#### **IMPORTANT INFORMATION**

Only use your Minibeast to cut through single layers of material when using standard annular cutters.

**Do not** attempt to cut through multiple layers/stacks/laminates of material with your Minibeast magnetic drilling machine using standard annular cutter. Once the first plate has been drilled, the centre slug will retain in the cutter. Attempting to continue the cutting process will result in cutter breakage, or can cause the magnet to break away from the surface, resulting in injury. (Note – always secure the machine to the workpiece with the provided safety strap).

To achieve multiple layer cutting, please refer to JEI's Multi Layer Cutter form, available for all Turbo™ types. This will allow the solid slugs to be retained in the cutter during the cut and be safely ejected once the hole cutting process is completed. Please refer to your JEI distributor for further details.

#### **Standard Cutter**



#### ***turbo* Multi Layer Cutter**



### **3.4 After the cut**

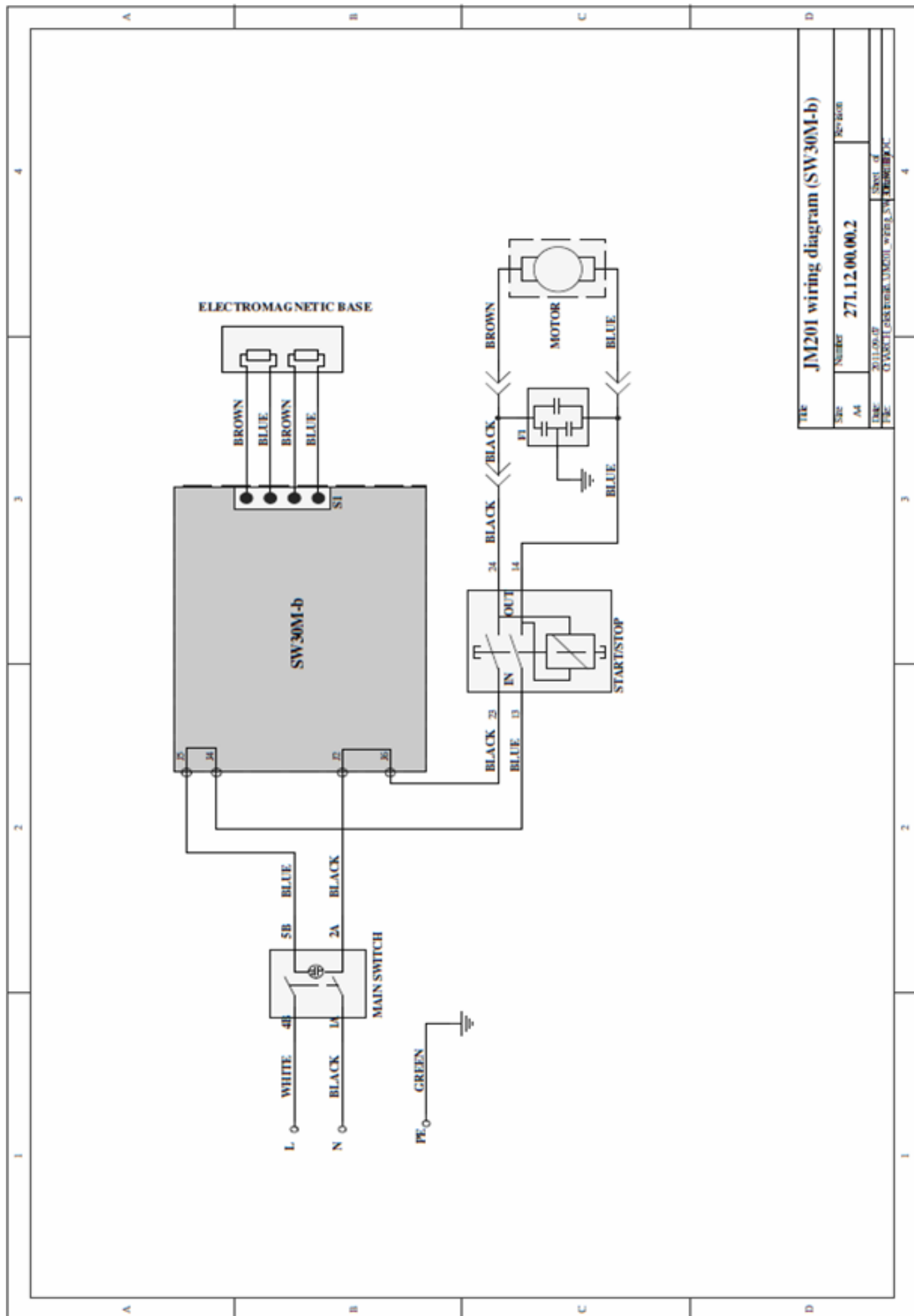
1. After the cut, has finished, the slug should be expelled on the down stroke, if the slug is not expelled after the cut, disconnect the machine from the power source and remove the cutter from the arbor body, then expel the slug. (Caution: the pilot should not be used to do this.

2. After the cut is finished return motor to the full upright position, depress **motor OFF** button wait until motor fully stops. Move magnet switch to the **OFF** position to release the magnetic base from the material.

**SPARE PART DIAGRAMS AND PARTS LIST ARE AVAILABLE TO DOWNLOAD  
FROM [WWW.JEIUK.COM](http://WWW.JEIUK.COM)**



### Wiring Diagram



4. DECLARATION OF CONFORMITY

## ***EC Declaration of Conformity***

We

***JEI DRILLING & CUTTING SOLUTIONS LTD  
UNIT 21 EMPIRE BUSINESS  
ENTERPRISE WAY  
BURNLEY, LANCASHIRE, BB12 6LT***

Declare with full responsibility that product:

## **MINIBEAST DRILLING MACHINE**

which the declaration applies to is in accordance with the following standards:

is manufactured in accordance with the following standards:

- EN 62841-1:2015
- EN 55014-1:2017
- EN ISO 12100:2010

and satisfies the regulations of the guidelines: 2014/30/EU, 2014/35/EU, 2006/42/EC, 2011/65/EU, 2012/19/EU.

Burnley, 10 November 2011



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David McFadden  
Managing Director

**5. WARRANTY CARD**

**WARRANTY CARD No.....**

..... in the name of Manufacturer warrants the Minibeast Drilling Machine to be free of defects in material and workmanship under normal use for a period of 12 months from date of sale.

This warranty does not cover cutting tools, damage or wear that arise from misuse, accident, tempering or any other causes not related to defects in workmanship or material.

Date of production .....

Serial number .....

Date of sale .....

Signature of seller.....

**1.05 / 1 February 2017**

***WE RESERVE THE RIGHT TO MAKE CORRECTIONS  
AND MODIFICATIONS IN THIS MANUAL WITHOUT PRIOR NOTICE***

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